Abstract

A multi-lamp drive device comprises a transformer, a drive circuit and at least a balanced inductor. The magnetic core of the transformer has a first side column, a second side column and at least a central column. A primary coil and a secondary coil are wound around the first side column and the second side column, respectively. The drive circuit can output an excitation power source to the transformer for driving lamps to be on based on the energy conversion characteristic of the transformer. With the help of the central column, the transformer can guide the counter magnetic flux generated by the load current without interfering the power conversion action of the transformer. Moreover, heat generated by the transformer due to a too larger load current can be reduced, and the protection function for the transformer during short circuit can also be accomplished.